STUDY OF DIETARY INTAKE OF NORMAL AND DEAF AND DUMB ADOLESCENET BOYS

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Abstract

The present study was taken up with the major objective to find out th dietary intake of 18 yrs. aged normal and deaf and dumb adolscent boys of Indore city. In general it is assumed that handicapedness imposes stress, resulting in faulty dietary intake. To ensure this 30 normal adolescent were selected by purposive sampling technique from P.M.B. Gujarati College Indore and 30 deaf and dumb boys from organization for Deaf and Dumbs Gumashta Nagar Indroe. Dietary intake was determined by 24 hour recall method and nutritional intake was derived on raw food weight basis and by using food composition table set by C. Gopalan (2000). Nutritional intake of these groups when compared with the RDA set by ICMR (1989) revealed mean calorie intake 2093 and 1795/day & mean protien intake 63.8 gm and 55.8 gm/day by deaf and dumb and normal adolescents respectively. Same was the case with intake of Thiamin 1.66 mg & 1.47 mg; Riboflaurin 1.20 mg & 0.97 mg; Niacin 14.13 mg & 12.52 mg; vit B_{12} *0.53 & 0.51 ug and Iron 34.3 mg & 31.13 mg daily by deaf and dumb and normal adolescent boys respectively. This shows that all nutrients intake is more in these disabled boys as compared to their normal counter parts. Except Thiamine & Iron intake all other nutrients intake is deficeint in both the categories when compared with RDA.*

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Introduction

Adolscence is a period of social and emotional adjustment. It is a bridge between childhood and adluthood. It is a period of changes in physical development, mental ability, attitude & thinking etc. In adolescent period anxiety level is very high characterised by tension, fear, doubt along with psychosomatic symptoms. As the two categories i.e, Normal & Deaf & Dumb boys differ in their behaviour it was interesting to study the Dietary intake of normal & Deaf & Dumb boys.

Material & Methods :

This work is carried out on normal and dead & dumb adolscent boys. 30 normal boys have been selected from P.M.B. Gujarati College and 30 Deaf and Dumb boys from organisation for Deaf and Dumb, Gumashta Nagar, Indore. 18 to 20 yrs. aged boys have been taken for the study by purposive sampling method.

Dietary intake was decided by 24 hour recall method Nutrient intake was derived by converting the used food portions in terms of raw food weights and by using food composition table set by C. Gopalan (2000). The nutrient intake thus derived was compared with the recommended Dietary Allowances set by I.C.M.R. (1989).

Statistical analysis was done by using statistical tool like mean, standard deviation, percentage and correlation.

Results :-

Table No. 1

Mean scores of height (cm) and weight (kg) of Normal and Deaf & Dumb boys

Group	Mean Age (yrs)	Observed mean height (c.m.)	ICMR Standard ht. in c.m.	Observed mean weight (kg)	ICMR standard wt. (kg)
Normal (n=30)	19.06	165	172	59.33	60
Deaf & Dumb (n=30)	18.83	160		5.77	

Anthropometric measurements are shown in Table no. 1. Mean age of normal boys is 19.6 yrs. and of deaf dumb boys is 18.83 yrs. Mean height of normal boys is 165 cm. and of deaf & dumb is 160 c.m. Table value shows significant difference in the height of the two groups. In both the categories height for age is below refernce which depicts growth retardation in both the groups. There is evidence that deaf and dumb boys taking more calories, protiens and other nutrient than the normal, But because of lack of physical exercise, they can not reach up to the standards. Anxiety increases BMR and they are lacking in height.

Table 2

Mean, S.D. and 'r' value of nutrient intake by Normal & Deaf & Dumb boys

Dietary Intake	Normal n=30			Deaf & Dumb n=30			
	Mean	SD	Correl-ation	Mean	SD	Correl-ation	RDA
Calorie	1795	425.96	+.31	2093	687.36	+.056	2425 Kcal/day
Protein (gm)	55.8	13.35	+.212	63.8	21.13	+.112	60 gm/day
Thiamin (mg)	1.47	.842	+.064	1.66	.54	+.2	1.2 mg/day
Riboflourin (mg)	.97	1.01	+.084	1.20	.42	+.12	1.4 mg/day
Niacin (mg)	12.52	3.01	+.151	14.13	4.78	+.14	16 mg/day
Vita B12 (ug)	.51	1.64	-.029	.53	.28	+.1	1 mg/day
Iron (mg)	31.13	8.03	-.173	34.03	12.33	+.12	28 mg/day

Mean calorie intake of deaf and dumb is 2093 K.Cal./day which is 298 K cal more than the normal category (1795 K.Cal./day) but both the categories do not reach to the R.D.A. value which is 2425 K.Cal/day

Mean score of protein intake of deaf & dumb boys is 63.8 gm/day as compared to normal boys 558 gm/day Correlation value for dead and dumb is + .112 & for normal it is + .212 which shows positive correlation between anxiety level & Protein intake.

Intake of Vitamin B_1 and Iron is higher in both the group as compared to R.D.A.

There is significant difference between B_2 Intake of deaf & dumb & normal boys and higher correlation is observed in both the groups.

Niacin intake is higher in Deaf & Dumb boys (14.13 & 12.52) but not up to the RDA.

There is no signficant difference into B_{12} intake of both group. Both are having very low amount of B_{12} as compared to R.D.A.

Discussion :-

Results show that the intake of all nutrients and calorie & protein is high in deaf and dumb boys than normal adolescent but is is low than the standard in both the groups.

Anxiety also affects the dietary intake. Different eating disorders can be observed in presence of anxiety. Nutrients are the chemicals obtained from food that allow the proper functioning of the body.

Whitakar et-al (1990) found that in adolescence the most common disorders are dysthymic disorder, depression and anxiety disorders followed by bulimia, anorexia nervous, obsessive compulsive disorder and penic disorder. Therefore to reduce anxiety level in the adolscent period, following recommendations are suggested to improve health and nutritional status of adolscent boys.

1. Adolscents should be served more than three meals a day like evening snacks and bed time milk.
2. Food should be served in sufficient quantities.

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